

BILLION-YEAR QUIZ

1. Some of the earliest living things to succeed in living out of water were

- ☐ fungi
- ☐ amphibians
- ☐ lungfish

2. “Lucy” is the name given to an early hominin of the species

- ☐ *Australopithecus afarensis*
- ☐ *Ardipithecus ramidus*
- ☐ *Homo ergaster*

3. The Earth orbits around the Sun and the Sun orbits around the center of the

- ☐ Andromeda Galaxy
- ☐ Milky Way Galaxy
- ☐ Alpha Centauri Galaxy

4. *Dimorphodon macronyx* is

- ☐ a flying reptile
- ☐ an herbivorous dinosaur
- ☐ a four-legged predator

5. Seven hundred million years ago, land surfaces were covered with

- ☐ not much of anything multicellular
- ☐ ferns
- ☐ grass

6. One of the characteristics of dinosaurs that make them different from earlier animals is their

- ☐ hip anatomy
- ☐ binocular vision
- ☐ huge size

7. The egg-laying duck-billed platypus is a mammal.

☐ True

☐ False

8. Even after these organisms released oxygen into the oceans for a billion years, there still wasn't enough oxygen in the atmosphere for people to survive. What organisms were these?

☐ choanoflagellates

☐ cyanobacteria

☐ cnidarians

9. Strong evidence that the four-legged herbivore, *Indohyus*, was an ancestor of whales comes from the structure of its

☐ vertebrae

☐ lungs

☐ inner ear

10. Long-necked camels were not well adapted to their environment and quickly went extinct as a result.

☐ True

☐ False

11. *Dimetrodon* was

☐ a flying reptile

☐ an herbivorous dinosaur

☐ a four-legged predator

12. Humans are mostly bilaterally symmetrical.

☐ True

☐ False

13. A baboon is

☐ a New World Monkey

☐ an Old World Monkey

☐ an ape

14. The humerus, ulna, and radius are

- ☐ fins
- ☐ bones
- ☐ muscles

15. Ardi (*Ardipithecus ramidus*) was adept at walking on the ground but lost the ability to move through the trees.

- ☐ True
- ☐ False

16. The Great Pyramids in Egypt were being built about

- ☐ 2,550 years ago
- ☐ 3,550 years ago
- ☐ 4,550 years ago

17. Spiders are arthropods.

- ☐ True
- ☐ False

18. Fortunately, no “Snowball Earth” episode lasted more than a hundred thousand years.

- ☐ True
- ☐ False

19. This dinosaur had four ‘wings.’

- ☐ Archaeopteryx
- ☐ *Microraptor*
- ☐ *Ornithomimus*

20. Marine organisms like clams, corals, barnacles, etc., have difficulty forming the shells they live in when

- ☐ nitrogen levels are high
- ☐ carbon dioxide levels are high
- ☐ helium levels are high

21. *Sahelanthropus tchadensis* may have been ancestral to both humans and

- ☐ chimpanzees
- ☐ Old World Monkeys
- ☐ orangutans

22. The common term for an “avian dinosaur species” is

- ☐ bird
- ☐ pterosaur
- ☐ *Archaeopteryx*

23. Rodinia is the name of a

- ☐ rodent
- ☐ mollusk
- ☐ supercontinent

24. Reducing the concentration of CO₂ (carbon dioxide) in the atmosphere would most likely lead to a cooler climate.

- ☐ True
- ☐ False

25. *Kimberella* is

- ☐ an animal
- ☐ a fungus
- ☐ a supercontinent

26. We are distant cousins of the following animals but our most recent common ancestor with each of them lived at different times. What sequence below shows when our most recent common ancestors lived, from most ancient to most recent?

- ☐ baboon, orangutan, gorilla, chimpanzee
- ☐ gorilla, baboon, orangutan, chimpanzee
- ☐ orangutan, baboon, chimpanzee, gorilla

27. The “Triassic-Jurassic Extinction” occurred about

- ☐ 2 million years ago
- ☐ 20 million years ago
- ☐ 200 million years ago

28. Which is most likely to be correct?

- ☐ *Homo neanderthalensis* is ancestral to *Homo heidelbergensis*
- ☐ *Homo heidelbergensis* is ancestral to *Homo sapiens*
- ☐ *Homo heidelbergensis* is ancestral to *Homo ergaster*

29. Humans and birds have a common ancestor.

- ☐ True
- ☐ False

30. Sponges are not true multicellular animals because they lack differentiated cells.

- ☐ True
- ☐ False

31. "Arboreal" means

- ☐ living in trees
- ☐ living in harbors
- ☐ living in bored-out holes

32. About 445 million years ago was the

- ☐ Ordovician-Silurian Extinction
- ☐ Ordovician-Silurian Extinction
- ☐ Ordovician-Silurian Extinction

33. Hadrosaurs normally walked on two legs but ran on all four.

- ☐ True
- ☐ False

34. Lake Turkana is in

- ☐ India
- ☐ Turkey
- ☐ Africa

35. Over the last billion years, the rotation of the Earth has

- ☐ slowed down
- ☐ speeded up
- ☐ stayed about the same

36. Humans are tetrapods.

- ☐ True
- ☐ False

37. The following does not have a placenta

- ☐ Pangolin
- ☐ Naked Mole Rat
- ☐ Tasmanian Devil

38. *Tiktaalik*, the 'fish-a-pod', could lift its head out of the water but could not breathe air.

- ☐ True
- ☐ False

39. India was once in the middle of the Indian Ocean.

- ☐ True
- ☐ False

40. Herbivorous dinosaurs, such as *Triceratops*, dined on vast grasslands.

- ☐ True
- ☐ False